

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
13 January 2005 (13.01.2005)

PCT

(10) International Publication Number
WO 2005/003421 A1

(51) International Patent Classification⁷: **D04H 1/40, 1/72**

(21) International Application Number:
PCT/IT2003/000414

(22) International Filing Date: 2 July 2003 (02.07.2003)

(25) Filing Language: Italian

(26) Publication Language: English

(71) Applicant (for all designated States except US): **A. CELLI NONWOVENS S.P.A** [IT/IT]; Via Romana Ovest 212, I-55016 Porcari, Lucca (IT).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **CELLI, Alessandro** [IT/IT]; Via Micheloni 20, I-55015 Montecarlo, Lucca (IT).

(74) Agents: **MANNUCCI, Michele** et al.; Ufficio Tecn. Ing. A. Mannucci S.R.L., Via della Scala 4, I-50123 Firenze (IT).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

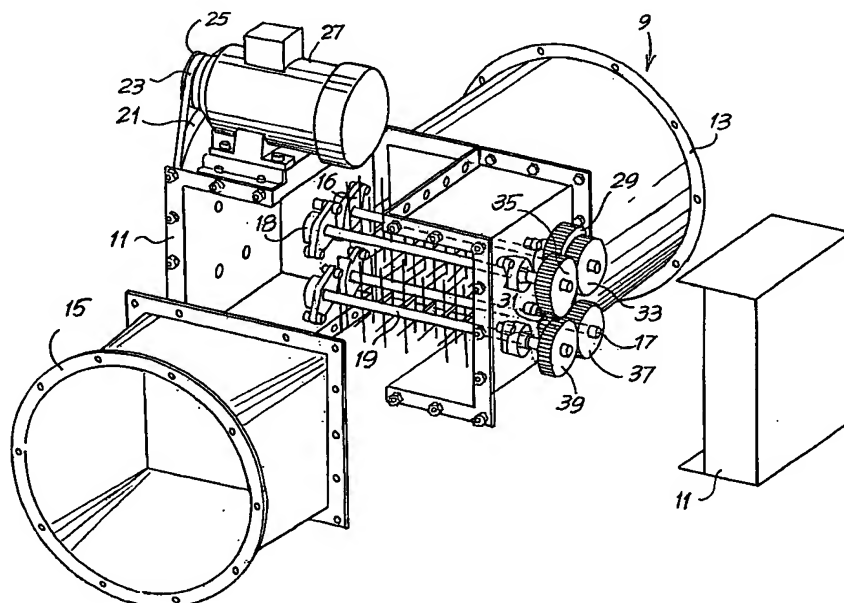
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **aIXING DEVICE FOR A HEAD FOR DRY-FORMING PAPER AND ASSOCIATED METHOD**



(57) Abstract: A mixing device (9) for fibers in a gaseous flow, specifically designed to be arranged on the line supplying a head for forming air-laid webs, is described. The device comprises a duct (11) for fibers suspended in a gaseous flow, with an inlet (13) and an outlet (15). A plurality of rotors (16-19), perpendicular to said flow and equipped with radial elements (43), is provided between the inlet and the outlet.